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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/712,828	BIGUS, JOSEPH P.	
	Examiner	Art Unit	
	Qing Chen	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-15,17-27 and 29-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-15,17-27 and 29-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 April 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is in response to the amendment filed on April 2, 2007.

2. **Claims 1, 2, 4-15, 17-27, and 29-31** are pending.

3. **Claims 1, 14, and 22-26** have been amended.

4. **Claims 3, 16, and 28** have been cancelled.

5. The objections to the drawings are withdrawn in view of Applicant's amendments to the drawings.

6. The objections to the abstract are withdrawn in view of Applicant's amendments to the abstract.

7. Applicant's amendments to the specification fail to fully address the objection due to the use of trademarks. Accordingly, this objection is maintained and further explained below.

8. The objections to Claims 11 and 22-25 are withdrawn in view of Applicant's arguments and amendments to the claims.

9. The 35 U.S.C. § 101 rejections of Claims 14, 15, and 17-25 are withdrawn in view of Applicant's arguments. The 35 U.S.C. § 101 rejection of Claim 16 is withdrawn in view of Applicant's cancellation of the claim. However, the 35 U.S.C. § 101 rejections of Claims 26, 27, and 29-31 are maintained in view of Applicant's arguments and further explained below. The 35 U.S.C. § 101 rejection of Claim 28 is withdrawn in view of Applicant's cancellation of the claim.

Response to Amendment

Specification

10. The disclosure is objected to because of the following informalities: "framework objects 226-233" should presumably read -- framework objects 226-231, 272, and 274 -- on page 9, paragraph [0048].

Appropriate correction is required.

11. The use of trademarks, such as JAVA, has been noted in this application (in particular, paragraphs [0049] and [0063]). Trademarks should be capitalized wherever they appear (capitalize each letter OR accompany each trademark with an appropriate designation symbol, *e.g.*, ™ or ®) and be accompanied by the generic terminology (use trademarks as adjectives modifying a descriptive noun, *e.g.*, "the JAVA programming language").

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. **Claims 26, 27, and 29-31** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 26, 27, and 29-31 recite a computer-readable media as a claimed element. However, it is noted that the specification describes such computer-readable media as embracing transmission media. Transmission media can take the form of acoustic or light waves, such as those generated during radio frequency (RF) and infrared (IR) data communications *(see Paragraph [00102])*. In addition, the specification also describes common forms of computer-readable media to include carrier wave *(see Paragraph [00102])*. Furthermore, the specification discloses that various forms of computer-readable media may be involved in carrying (emphasis added) one or more sequences of one or more instructions to CPU for execution *(see Paragraph [00103])*. Consequently, the computer-readable media can be reasonably interpreted as carrying electrical signals.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism *per se*, and as such are nonstatutory natural phenomena. *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 112-14 (1853). Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. **Claims 1, 2, 4-15, 17-27, and 29-31** are rejected under 35 U.S.C. 102(e) as being anticipated by **Grindrod et al. (US 6,868,413)**.

As per **Claim 1**, Grindrod et al. disclose:

- designating a customizable element of a set as a customizable template *(see Column 8: 27-37, "Preferably for each condition, two expressions 242, 244 and a comparison operator 246 for comparing values of the two expressions as well as a logical operator 248 for allowing grouping of conditions may be specified. The two expressions 240, 242 may be created by the administrator using an expression builder ...")*;

- compiling said customizable element into at least one object to form a ruleset *(see Column 14: 25-27, "... XML is generated from data regarding the new or modified business rule as entered or modified via the user interfaces."; Column 20: 50-53, "Examples of computer or program code include machine code, as produced, for example, by a compiler, or files containing higher level code that may be executed using an interpreter.")*; and

- parsing said set to detect said customizable element designated as a customizable template *(see Figure 4: 232 and 234; Column 8: 44-57, "The business logic application preferably processes each condition line by line beginning with the first condition specified in the user interface 230." and "... the business logic application evaluates the first condition 232 to determine if the transaction data for state is equal to C. If the first condition 232 is met, then the business logic application proceeds to evaluate the second condition 234.").*

As per **Claim 2**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- wherein said set comprises a ruleset *(see Figure 2; Column 7: 8-16, "The business rules management console 200 facilitates management of the business rules application and allows the administrator or end user to create and/or modify business rules in order to customize business processes.").*

As per **Claim 4**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- customizing said element *(see Column 11: 41-48, "The following are examples of expressions in which symbols are designated with braces characters {}. Examples of expressions include: Hello, the time is {TIME}. The Help Desk Ticket {TR, Problem No.} was created in response to your request on {DATE} at {TIME}. {DB, Clients, Client ID, "Sequence"=1221} ... ").*

As per **Claim 5**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- wherein said element comprises a variable *(see Column 11: 49-55, "... symbols may represent various types of data such as ... system environmental variables ...").*

As per **Claim 6**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- wherein said element comprises a rule *(see Column 11: 49-55, "... symbols may represent various types of data such as ... business rules templates ...").*

As per **Claim 7**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- wherein said element comprises a ruleset *(see Column 11: 49-55, "... symbols may represent various types of data such as ... business rules templates ...").*

As per **Claim 8**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- designating a ruleset of said set as a customizable ruleset template *(see Column 12: 41-44, "Preferably, business rules templates are provided. Business rules templates are predefined and reusable text items that can be defined, stored, and reused by various business rules.").*

As per **Claim 9**, the rejection of **Claim 8** is incorporated; and Grindrod et al. further disclose:

- generating a customized ruleset from the customizable ruleset template *(see Column 12: 41-44, "Preferably, business rules templates are provided. Business rules templates are predefined and reusable text items that can be defined, stored, and reused by various business rules." and 48-49, "Templates allow the same string of text to be re-used by multiple business rules.").*

As per **Claim 10**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- enabling customization in a deployment environment *(see Column 7: 39-44, "In particular, FIGS. 3-6 are exemplary user interfaces 220, 230, 250, and 270 for entering or modifying and displaying general information, conditions, actions, and schedule, respectively, regarding a new business rule or an existing business rule selected via, for example, the business rules manager.").*

As per **Claim 11**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- enabling customization in a development environment *(see Column 7: 39-44, "In particular, FIGS. 3-6 are exemplary user interfaces 220, 230, 250, and 270 for entering or modifying and displaying general information, conditions, actions, and schedule, respectively,*

regarding a new business rule or an existing business rule selected via, for example, the business rules manager.").

As per **Claim 12**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- re-editing a previously generated rule *(see Column 7: 30-32, "From the business rules management console 200, the administrator may elect to create, modify, or delete a business logic rule.").*

As per **Claim 13**, the rejection of **Claim 1** is incorporated; and Grindrod et al. further disclose:

- wherein a new ruleset is generated from a customizable ruleset template, and a pre-existing customizable rule template is associated with said new ruleset and is unchanged *(see Column 12: 41-44, "Preferably, business rules templates are provided. Business rules templates are predefined and reusable text items that can be defined, stored, and reused by various business rules." and 48-49, "Templates allow the same string of text to be re-used by multiple business rules.").*

Claims 14, 15, and 17-25 are system claims corresponding to the method claims above (Claims 1, 2, 4-12) and, therefore, are rejected for the same reasons set forth in the rejections of Claims 1, 2, 4-12.

Claims 26, 27, and 29-31 are computer-readable media claims corresponding to the method claims above (Claims 1, 2, 4, 8, and 9) and, therefore, are rejected for the same reasons set forth in the rejections of Claims 1, 2, 4, 8, and 9.

Response to Arguments

16. Applicant's arguments filed on April 2, 2007 have been fully considered, but they are not persuasive.

In the remarks, Applicant argues that:

a) Claims 26-27 and 29-31 recite computer-readable media for storing software instructions for customizing a rule-based application. As the Supreme Court has recognized, Congress chose the expansive language of 35 USC §101 so as to include "anything under the sun that is made by man" as statutory subject matter. Diamond v. Chakrabarty, 447 U.S. 303,308-09, 206 USPQ 193, 197 (1980) (MPEP 2106, emphasis added). The Applicants respectfully submit that computer-readable media, including acoustic or light waves carrying instructions that are readable by a processor, are made by man and are not naturally occurring phenomena. Accordingly, the Applicants respectfully submit that the subject matter to which claims 26-27 and 29-31 is drawn is patentable, and, as such respectfully request that the rejection of claims 26-27 and 29-31 under U.S.C. §101 be withdrawn.

Examiner's response:

a) Examiner disagrees with Applicant's assertion that computer-readable media, including acoustic or light waves carrying instructions that are readable by a processor, are made by man and are not naturally occurring phenomena. The 35 U.S.C. § 101 rejections of Claims 26, 27, and 29-31 are consistent with the Office's current policies regarding non-statutory subject matter. Federal courts have held that 35 U.S.C. 101 does have certain limits. First, the phrase "anything under the sun that is made by man" is limited by the text of 35 U.S.C. 101, meaning that one may only patent something that is a machine, manufacture, composition of matter or a process. See, e.g., *Alappat*, 33 F.3d at 1542, 31 USPQ2d at 1556; *Warmerdam*, 33 F.3d at 1358, 31 USPQ2d at 1757 (Fed. Cir. 1994). The subject matter courts have found to be outside of, or exceptions to, the four statutory categories of invention is limited to abstract ideas, laws of nature, and natural phenomena.

A claimed signal is clearly not a "process" under § 101 because it is not a series of steps. The other three § 101 categories of machine, manufacture, and composition of matter "relate to structural entities and can be grouped as 'product' claims in order to contrast them with process claims." 1 D. Chisum, *Patents* § 1.02 (1994). The three product categories have traditionally required physical structure or material. Such signal claims are ineligible for patent protection because they do not fall within any of the four statutory categories of § 101. See 35 U.S.C. § 101 rejections of Claims 26, 27, and 29-31 above.

In the remarks, Applicant argues that:

b) By contrast, the cited portion of Grindrod at most teaches that a business logic application processes the conditions of a given business rule in order to determine if the

conditions have been met (i.e., such that a specified action is triggered). That is, the business logic application is given an existing business rule, and evaluates the conditions of the rule in order to determine which actions (if any) to take. Grindrod does not teach, in the course of authoring a ruleset, parsing a set in order to detect customizable elements or templates in the set.

Examiner's response:

b) Examiner disagrees. Grindrod et al. clearly disclose parsing a set in order to detect customizable elements or templates in the set *(see Figure 4: 232 and 234; Column 8: 44-57, "The business logic application preferably processes each condition line by line beginning with the first condition specified in the user interface 230." and "... the business logic application evaluates the first condition 232 to determine if the transaction data for state is equal to C. If the first condition 232 is met, then the business logic application proceeds to evaluate the second condition 234.").*

Note that the conditions, as shown in Figure 4, are interpreted as customizable element in a set, which during processing of the condition line (parsing said set), the conditions are being evaluated (detect said customizable element).

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QC / ac
May 14, 2007

WEI ZHEN
SUPERVISORY PATENT EXAMINER